

bill (exposed culmen) 27; depth of bill at nostril 6.8; width at same point 5.6; metatarsus 8. For the type-specimen Dubois gave: wing 50 mm.; culmen 23; tarsus 8.

The known distribution of *Corythornis leopoldi* now includes the region of Lake Leopold II. and the Ituri forest at Avakubi, where this single specimen (all we ever saw) was found along a small forest-brook. It may be of interest to note that in this region of dense forest—unbroken save for the clearings of mankind—*Corythornis cristata* is extremely rare, even along the banks of a large river like the Ituri.

XXVI.—*On the Birds of the Province of Hupeh in Central China.* By J. D. LA TOUCHE, C.M.Z.S., M.B.O.U.

THE following notes are based on a small collection of birds made from August 1918 to May 1919, almost entirely in the Chang-yang Hsien, a district of the province of Hupeh on the south bank of the Yangtse, south-east of Ichang, and not far from the Hunan border. The Chang-yang district is within the region explored by the late Mr. Walter R. Zappey, the very able collector who accompanied Mr. E. H. Wilson in his journeys throughout Hupeh and Szechuen, and who made in those provinces for Mr. John Thayer, the magnificent collections of vertebrates now deposited in the Museum of Comparative Zoölogy at Harvard College, Cambridge, Mass. Zappey obtained in Chang-yang Hsien forty species of birds. Amongst these were:—*Dryobates pernyi*, *Babax lanceolatus*, *Trochalopteryx ellioti*, *Yuhina diademata*, and *Pyrrhula erythaca altera*, none of which was obtained by my hunter. The country in that part of Hupeh is mountainous, the elevation reaching, as I was informed by Mr. Wilson, to at least 6000 feet.

The country about Shasi, where I was stationed from November 1917 to May 1919, is perfectly flat, and consists of a cultivated plain, much broken by swamps, creeks, and lakes. I did practically no collecting at Shasi, and the few

notes regarding this locality were taken in gardens and in the close vicinity of the town.

The mountainous parts of Hupeh were first explored by Mr. F. W. Styan, who published notes on his collections in 'The Ibis' (1899, p. 289). In 1907 and 1908, Mr. Zappey collected, as mentioned above, in Hupeh and Szechuen. An account of his collections was published in the Memoirs of the Museum of Comparative Zoölogy, at Harvard (Mem. Mus. Comp. Zoölogy, vol. xl. no. 4, August 1912). The paper on the birds, by Messrs. Thayer and Bangs, will form the basis of any future work on central Chinese Ornithology, as it contains notes on 257 species and subspecies, collected or observed in Hupeh, out of the total of 358 mentioned in Messrs. Thayer and Bangs' work. In this paper the authors figure a Flycatcher, *Niltava lychnis*, which had been made known from Fohkien some years before as *N. davidi*.

I am greatly indebted to Fathers Thomas Kempenaers, Thaddée Jacobs, and Columban Clément, and to the late Father Anselme de Hemptinne, all of the Belgian Franciscan Mission of north-west Hupeh, for information regarding the country, for procuring a native hunter and assisting him to collect for me, and for a series of Pheasants. My best thanks are also due to Messrs. Chubb and Wells of the Natural History Museum and to Dr. E. Hartert of Tring for their kind assistance in identifying specimens for me, and to Lord Rothschild for kindly allowing me to work in his Museum.

On my way back to China in April 1920, I visited the Museum at Harvard College and enjoyed the hospitality of Mr. Outram Bangs, who very kindly gave me two days of his time. I was thus enabled to inspect most of the Chinese birds collected by Zappey, as well as the fine Yunnan collection acquired by that Museum in 1912.

In the following list, the birds previously unrecorded from Hupeh are marked with an asterisk.

1. ***Corvus macrorhynchus*.**

Thayer & Bangs, Mem. Mus. Comp. Zoöl. Harvard Coll. vol. v. no. 4, p. 197.

A common resident at Shasi. A young bird in moult and an adult, dated 30 October, 1918, from Chang-yang Hsien.

2. *Corvus torquatus* Less.

T. & B. p. 197.

A common resident at Shasi. Builds in February.

3. *Corvus frugilegus pastinator* Gould.

T. & B. p. 197.

In winter at Shasi.

4. *Pica pica sericea* Gould.

T. & B. p. 199.

A common resident. A young bird from the hills has no white on the rump.

5. *Urocissa erythrorhyncha* (Gm.).

T. & B. p. 199.

Adult and young from Chang-yang Hsien. A family of full-grown young seen at Ichang on the 27th of May.

6. *Cyanopica cyana interposita* Hart.

Cyanopica cyana swinhoi T. & B. p. 199.

Two specimens obtained at Itu on the 21st and 24th February are similar to those from north-east Chihli, and differ, as stated by Dr. Hartert, from Lower Yangtse birds. Azure-winged Magpies are common at Shasi, but no specimens were secured, so that I cannot say whether the birds which occur there belong to the Lower Yangtse or to the Northern race.

7. *Garrulus glandarius sinensis* Gould.

T. & B. p. 191.

One young bird in first plumage and two adults from Chang-yang Hsien. The latter are similar to average birds from Fohkien with merely streaked forehead. Mr. Bangs showed me the series obtained by Zappey. Among these there is one specimen which is distinctly striped on the crown. Two others have this part faintly marked. These specimens are mentioned in Thayer and Bangs' work.

8. *Parus major artatus* Thayer & Bangs.

Parus major artatus T. & B. Bull. M. C. Z. May, 1909, p. 140; M. M. C. Z., August 1912, p. 185.

Young and three adult dated 25 September and 1 and 2 October, 1919, from Chang-yang Hsien. The adults are not distinguishable as regards colouring from the Tits obtained in north-east Chihli. These latter are certainly distinct from the Japanese bird and should stand as *Parus major artatus* Thayer and Bangs.

9. *Parus venustus* Swinhoe.

T. & B. p. 184.

An adult and an immature male from Chang-yang Hsien, dated 12 October. On 1 April, 1919, a party of these pretty Tits appeared in a large compound at Shasi, where they spent some time, bathing in a ditch. They then moved on and were not seen any more.

10. *Ægithalus concinnus* (Gould).

T. & B. p. 185.

Three adults from Chang-yang Hsien.

11. *Ægithalus glaucogularis* (Gould).

T. & B. p. 185.

One specimen from Itu, dated 29 February.

12. *Suthora webbiana suffusa* Swinhoe.

T. & B. p. 171.

Two nestlings collected in late summer in Chang-yang Hsien. A single bird seen at Shasi on 14 April.

13. *Dryonastes perspicillatus* (Gm.).

T. & B. p. 167.

Heard on the plain on 29 September. Two specimens from Itu, dated 21 and 24 February.

14. *Dryonastes sannio* (Swinhoe).

T. & B. p. 167.

Two adults. Chang-yang Hsien, early autumn, and Itu, 17 February.

15. *Trochalopteron canorum* (L.).

Young and adult from Chang-yang Hsien at the end of the summer.

16. *Ianthocincla cinereiceps* (Styan).

T. & B. p. 167.

An adult male with a pure black cap, as in Fohkien examples, dated 24 September, and a young male, dated 22 November, with greyish-olive crown, the feathers of which are narrowly edged with dark brown. The secondaries and the rectrices in the adult are broad and truncated at their extremities, whereas in the young bird they are narrower and rounded.

17. *Pomatorhinus macclellandi gravivox* David.

T. & B. p. 167.

Chang-yang Hsien. Two examples sexed male and one sexed female, dated 15 October and 1 January, and 3 February, answer exactly to Père David's description in 'Les Oiseaux de la Chine,' except that the under mandible is livid grey, not yellow. The legs are dark reddish with pale claws. An example, given to me by Mr. Styan, and labelled "Ichang, Nov. 1893," has the upper parts of a somewhat golden brown, and the under mandible yellow.

18. *Pomatorhinus ruficollis styani* Seebohm.

T. & B. p. 167.

Chang-yang Hsien, six specimens, dated 26 August to 29 December. Wing 2.83 to 3.10 in. This Scimitar-Babbler, which occurs on the Yangtse as far east as Chinkiang, is very different from the Fohkien bird, having olive-brown, not chestnut-brown, upper parts and the underparts greyish- or pale brownish-olive.

19. *Schœniparus brunneus olivaceus* (Styan).

Styan, *Ibis*, 1896, p. 312.

One example obtained in Chang-yang Hsien at the end of the summer. I saw at the Museum at Harvard the Babbler designated by Thayer and Bangs as *Schœniparus variegatus*

Styan. It is certainly not that bird but seemed very close to *S. b. olivaceus* Styan.

20. *Zosterops palpebrosa simplex* Swinhoe.

T. & B. p. 166.

One seen at Shasi on 4 July.

21. *Pycnonotus sinensis* (Gm.).

T. & B. p. 166.

A common resident at Shasi. A tame bird, seen in the house of a Manchu lady at Kingchow, was a good mimic.

22. *Pycnonotus xanthorrhous andersoni* (Swinhoe).

T. & B. p. 165.

Chang-yang Hsien. Young and adult. End of summer, 16 December and 2 February.

Mr. Bangs pointed out to me that the central China bird had but a slightly brown breast and paler under tail-coverts than Yunnan specimens and that *leus andersoni* Swinhoe, founded on central China birds, was a good form. This is correct.

23. *Haringtonia leucocephala* (Gm.).

T. & B. p. 165.

Chang-yang Hsien. Two adults with pure white heads and necks.

24. ? **Iole maccllellandi holti* (Swinh.).

♂. Chang-yang Hsien, 30 December, 1918.

Compared with *I. m. holti*, the bill in this specimen appears very slight and shorter by several mm. The back is grey, with a tinge of brown, and the breast is but slightly marked with white. Wing, 3.91 in.; tail, 3.90; culmen, .75.

25. *Spizixos semitorques* Swinhoe.

T. & B. p. 166.

Shasi. A party seen at Shasi in August.

Chang-yang Hsien. Young and adult.

26. *Sitta europæa sinensis* Verreaux.

T. & B. p. 186.

Chang-yang Hsien, three examples dated 19 September, 23 November, and 15 January, quite similar to birds from N.W. Fohkien.

27. *Anorthura troglodytes szetschuana* (Hartert).

T. & B. p. 172.

A single specimen from Chang-yang Hsien dated 28 November is much darker than any of my specimens of Wrens from northern China and the Lower Yangtze.

28. *Phylloscopus borealis* (Blasius).

T. & B. p. 181.

Seen at Shasi on migration on 29 August and 16 September.

29. *Phylloscopus nitidus plumbeitarsus* Swinhoe.

T. & B. p. 181.

Chang-yang Hsien, two examples dated 4 and 12 September. This Willow-Warbler, which is so abundant in north-eastern China, has not apparently been obtained on the south-east coast or, as far as I know, on the Lower Yangtze.

30. *Phylloscopus superciliosus* (Gm.).

T. & B. p. 181.

Chang-yang Hsien, two examples dated 18 and 19 September. Shasi. Seen or heard: 20 April (?), 16 September, 19 October (?), 18 April.

31. *Herbivocula schwarzi* Radde.

Chang-yang Hsien, one example dated 16 October.

Quite a common bird in northern China on migration. Obtained by Styan at Kiukiang, and also occasionally taken in north-west Fohkien.

32. *Cisticola cisticola tintinnabulans* (Swinhoe).

T. & B. p. 179.

Seen at Shasi on 4 June and 12 July. Apparently breeding.

33. **Acrocephalus arundinaceus orientalis** T. & S.*Acrocephalus arundinaceus magnirostris* T. & B. p. 178.

Shasi. Heard singing in willows on 19 and 28 May, and 9 June.

Ichang. Seen about the middle of May.

34. *? **Acrocephalus sorghophilus** Swinhoe.

A small bird, which appeared to me to be of this species, seen at Shasi among grass and willow brush on 19 September, 1918.

35. * **Phragmaticola aëdon** (Pallas).

One example seen in our garden at Shasi on 9 September, 1918, another on the mountains, altitude about 3050 feet, five miles inland on the north bank of the Ichang gorge on 21 May, 1919. This is a very rare bird in south-east China. The migration route is evidently through western Hupeh.

36. **Suya crinigera parumstriata** A. Dav.

T. & B. p. 182.

Chang-yang Hsien. One young bird dated 7 September.

37. **Locustella lanceolata** (Temm.).

T. & B. p. 178.

Shasi. Seen on marshy ground and in rice fields on 29 September.

38. **Buchanga atra cathœca** (Swinhoe).

T. & B. p. 197.

Shasi. Seen passing on 16 and 18 September. Great numbers in fields on 29 September following.

39. **Buchanga leucogenys cerussata** Bangs & Phillips.

T. & B. p. 197.

Shasi. One seen on 18 September.

Chang-yang Hsien. Young, dated 4 and 14 September.

Ichang gorges. Breeding at end of May.

40. **Lanius schach** L.

T. & B. p. 182.

Shasi. Seen in reed beds on 12 January.

Itu. Examples shot in late winter.

41. **Lanius sphenocercus* Cab.

One specimen shot at Shasi on 12 January. Wing 4.75 in. Total length 11.9 in. Iris dark brown, bill black, lower mandible whitish at base. Stomach contained a caterpillar and remains of small beetles.

42. *Lanius lucionensis* L.

T. & B. p. 183.

Summer at Shasi. Seen 9, 27, 29 June, 6 July, 4 August (young bird), 4 September.

43. **Lanius tigrinus* Drap.

One migrant seen at Shasi on 18 May.

Two seen at Ichang on 27 May probably had a nest.

44. *Pericrocotus cinereus* Lafresn.

One seen at Shasi on 19 October, 1918.

45. *Campophaga melanoptera* Rüppell.

T. & B. p. 165.

One example from Chang-yang Hsien dated 3 September.

46. *Oriolus indicus* Jerd.

T. & B. p. 196.

Summers at Shasi, at Ichang and in Yangtze gorges. In 1918 first heard at Shasi on 30 April. Young seen there on 6 September.

47. *Spodiopsar cineraceus* (Temm.).

T. & B. p. 196.

Shasi in winter.

48. *Æthiopsar cristatellus* (L.).

T. & B. p. 196.

Shasi and lowlands generally. Abundant and resident.

49. *Alseonax latirostris* (Raffles).

T. & B. p. 162.

Seen at Shasi on 14, 16, 17, 19 September, 10 October, 8 May.

50. *Hemichelidon sibirica* (Gm.).

Seen at Shasi on 4 and 9 September.

Chang-yang Hsien. Two immature birds dated 30 August and 6 September.

51. *Siphia parva albicilla* (Pall.).

T. & B. p. 163.

Seen at Shasi on 14, 16, 17, 22, 24, 29 September.

52. *Cyanoptila cumatilis* Thayer & Bangs.

Cyanoptila cumatilis T. & B., Bull. M. C. Z., May 1909, no. 52, p. 141; T. & B., M. M. C. Z. 1912, no. 4, p. 163.

Chang-yang Hsien, ♀, 26 September, 1918.

From an examination of the fine series of this Flycatcher in the Museum at Harvard, it appears quite clear that the bird described by David and Oustalet and figured in the "Atlas" of 'Les Oiseaux de la Chine' is an adult example of this very distinct form. It is chiefly distinguished from the Japanese bird by the greenish-blue, unspotted, upper parts and the blue throat and breast. In the Harvard examples the blue breast is separated from the white abdomen by a blackish marginal band. In the adult Japanese bird the throat and breast are black just washed with blue, and the back is smalt-blue, with more or less distinct markings in the shape of black shaft-stripes, chiefly on the scapulars and upper tail-coverts. I have unspotted examples from Chinkiang and Shaweishan (30 miles east of the mouth of the Yangtze), but all my specimens from Fohkien are more or less spotted above, and are therefore referable to the Japanese bird. I have no examples from north-east China, where this Flycatcher is apparently very rare. Père David, who obtained specimens at Peking, makes no mention of spots on the upper parts.

The Japanese Blue and White Flycatcher apparently travels up the coast through Fohkien, Chekiang and S. Kiangsu to Shaweishan, where it meets the unspotted green-backed form, and thence crosses to Japan.

53. *Terpsiphone incii* (Gould).

T. & B. p. 164.

Shasi, 18 May, 19 October, 1918; 2 May, 1919.

Chang-yang Hsien. Two examples taken at end of summer.

Summers at Ichang and in neighbouring mountain districts.

54. ? *Pratincola torquata prjewalskii* Pleske

A Stonechat seen once at Shasi.

55. *Oreicola ferrea haringtoni* Hart.

T. & B. p. 178.

Chang-yang Hsien. ♀ 21 September, 1918. Primaries not fully grown.

56. *Henicurus sinensis* Gould.

T. & B. p. 175.

Chang-yang Hsien. Three examples dated 8 October, 1918, 6 and 7 January, 1919.

57. *Rhyacornis fuliginosa* (Vigors).

T. & B. p. 177.

5 ♂, 3 ♀, dated 7, 9, 14 October, and 31 December, 1918, 2, 3, and 4 January, 1919.

58. *Chaimarrornis leucocephala* (Vigors).

T. & B. p. 176.

Chang-yang Hsien. ♂ ad. 4 January, 1919.

59. *Phœnicurus aureoreus* (Pall.).

T. & B. p. 176.

Chang-yang Hsien. Juv. August 1918. ♀. 9, 18, and 30 September. ♂. 8, 19 October, 1918.

Apparently a common breeding species in the mountains.

Shasi. Seen in gardens on migration on 24 March, 1918, 10 and 19 October, 1918, 16 and 24 March, 1919.

60. *Copsychus saularis* (L.).

T. & B. p. 177.

One example from Itu. A common resident on the plains.

61. *Myiophonus cæruleus* (Scop.).

T. & B. p. 168.

Chang-yang Hsien. Young and adult.

The young are plain, very dark violet-blue above, and dull black below.

62. *Merula mandarina* Gould.

T. & B. p. 173.

Common resident on the plains.

63. **Merula castanea gouldi* Verr.

T. & B. p. 173.

On 5 December, 1918, I shot in our garden at Shasi a specimen of this fine bird, which was originally discovered by Père David in western Szechuan, and has recently been obtained in the Tsing Ling (Shensi Province). It is apparently a female of the year, and had probably been driven down from the Hupeh Mts. by the bad weather prevailing at the beginning of the month it was shot in. The soft parts were coloured as follows:—Iris dark brown, rim of eyelid and gape yellow, bill dull yellow with dark tip and base, legs dull yellowish with brownish-grey claws. Wing 5.75 in.; tarsus 1.28 in.; total length 10.5 in. The stomach, which had a dark red-brown lining, was corrugated, and contained only two very small snail-shells.

64. **Merula obscura* (Gm.).

Chang-yang Hsien. ♀ (bird of year), 20 September, 1918.

65. *Merula naumanni* (Temm.).

T. & B. p. 174.

Chang-yang Hsien. 14 & 30 December.

66. *Merula fuscata* (Pall.).

T. & B. p. 175.

Chang-yang Hsien. 12 December, 1918.

67. *Oreocincla varia* (Pall.).*Oreocincla aurea* T. & B. p. 174.

Chang-yang Hsien. Three examples.

Shasi. One seen on 19 October, 1918.

68. *Petrophila solitaria pandoo* Sykes.*Petrophila solitarius solitarius* T. & B. p. 175.

Chang-yang Hsien. ♂ ad. dated 25 September, 1918.

69. *Eophona melanura* (Gm.)

T. & B. p. 191.

Common resident.

70. *Passer montanus* L.

T. & B. p. 191.

Abundant resident.

71. *Passer rutilans* Temm.

T. & B. p. 191.

Seen on 21 May, 1919, at the "Bungalow," alt. 3051 ft., about 5 miles north of Ichang Gorge, apparently breeding.

72. *Emberiza aureola* Pall.

T. & B. p. 194.

Shasi. Very abundant. One seen on 1 September, 1918, in gardens; many flocks on the marshes and cleared paddy-fields on 29 September, all birds composing the flocks apparently moulting.

73. *Emberiza spodocephala melanops* Blyth.

T. & B. p. 195.

On 14 May, 1918, a male of this Bunting was singing perched on a Wutung-tree (*Sterculia platanifolia*) in our garden. He reappeared there on the 22nd, 25th, and 26th, and on the 25th a female turned up, which was apparently mated with our visitor. The pair had doubtless a nest in the close vicinity, as was plainly shown by the anxious behaviour of the cock-bird. The following year, on 17 April, I saw several of these Buntings in the bean-fields, and on the 2nd May following a single male was again seen in the garden.

This Bunting is very rare on the Lower Yangtze. Its breeding-quarters are without doubt the plains and banks of the Yangtze in central China.

74. *Emberiza cioides* Brandt.

Emberiza cioides castaneiceps T. & B. p. 195.

Chang-yang Hsien. Juv. and ad. 4 September (juv.),
15 September, 29 November.

Ichang, 27 May, 1919. Seen breeding on hills of the
south bank.

75. *Emberiza elegans* Temm.

T. & B. p. 194.

Chang-yang Hsien. End of summer. Probably breeding.

76. **Emberiza tristrami* Swinhoe.

Seen on hills south of Ichang Harbour on 27 May, 1919.
Probably breeding.

77. *Cotile fohkienensis* La Touche.

T. & B. p. 161.

Sand-Martins seen at Shasi on 12 May, 1918 (flying
down river), 15 June, 1918, and 13 May, 1919 (adult and
young hawking in company with *H. gutturalis* and *H.*
nipalensis) were most probably of this species.

78. *Hirundo rustica gutturalis* Scop.

Common in summer at Shasi.

First appearance 1918 : 25 March (one).

Time of departure of local birds : about end August.

Travellers seen 5-8 November, 1917.

First appearance 1919 : 22 March (hawking over river and
bund) ; 25 and 26 March (many).

79. *Hirundo daurica nipalensis* Hodgs.

T. & B. p. 162.

Summer visitant to Hupeh.

80. ?**Chelidon urbica whitelyi* Swinh.

A Martin with very white rump and underparts seen on
21 May flying over the mountains, 5 miles north of Ichang
Gorge. Alt. about 3000 ft.

81. *Motacilla leucopsis* Gould.

T. & B. p. 188.

Chang-yang Hsien, 15 October.

82. ? *Motacilla ocularis* Swinh.

T. & B. p. 188.

A common migrant or winter visitant all over central and eastern China, but I have only one note on a Wagtail seen at Shasi on 19 October, which was of this or of the preceding species.

83. *Motacilla boarula melanope* Pall.

T. & B. p. 188.

Shasi. Common enough in winter.

84. *Motacilla flava simillima* Hartert?

T. & B. p. 188.

Yellow Wagtails, either this or *M. borealis*, seen on marshy fields on 29 September, 1918.

85. *Anthus spinoletta blakistoni* Swinh.

T. & B. p. 189.

Shasi. Winters on the plain.

86. *Anthus richardi* Vieill.

T. & B. p. 189.

Shasi. Noticed on the plain on 29 September, 1918.

87. *Alauda arvensis* subsp.?

Shasi. In winter.

88. *Alauda gulgula cœlivox* Swinh.

Shasi. Resident or breeding.

89. *Gecinus canus guerini* Malh.

T. & B. p. 160 (part).

A single female example from the low hills at Itu is apparently referable to this subspecies. I did not collect any Green Woodpecker at Shasi, although these birds are common there, but the probabilities are that *G. c. guerini* extends to the foothills east of Ichang.

90. *Gecinus canus jacobsii**Picus canus guerini* T. & B. p. 160 (part).

Gecinus canus jacobsii La Touche, Bull. B. O. C. xl. 1919, p. 50.

Near *G. c. ricketti* of Fohkien but greyer below, more golden (less olive) green above, with darker garnet-coloured forecrown and less black over the eye. Base of lower mandible bright yellow.

Chang-yang Hsien. Common resident in the mountains of this district. I saw the fine series collected by Zappey. It is plainly divisible into two sections:—*G. c. guerini* and a dark bird, some of which, obtained in the Hupeh Mts., are presumably of this form. Unfortunately, the Museum of Comp. Zoölogy had not any series from other parts of China, so that exact identification of the birds in the Zappey collection was difficult.

91. **Dryobates hyperythrus subrufinus* Cab. & Heine.

T. & B. p. 160.

Chang-yang Hsien. One ♂ dated 27 September, 1918.

The specimen collected is a bird of the year with dark umber-brown underparts and remains of nestling plumage about the head and neck. This is the first record of this Woodpecker in Hupeh. Zappey obtained one in Szechuen. I have a female from Shanghai and a long series from north-east Chihli, where it is very common on passage.

92. *Dryobates major cabanisi* (Malh.).

Dryobates cabanisi cabanisi T. & B. p. 160.

Abundant both in Chang-yang Hsien and on the plain. The few examples collected are variable, much as in birds from the Lower Yangtze, as regards the tints of the underparts and the spotting of the secondaries.

93. *Dryobates pygmæus clementii*.

Yungipicus scintilliceps scintilliceps T. & B. p. 161.

Yungipicus pygmæus clementii La Touche, Bull. B. O. C. xl. 1919, p. 51.

The Spark-headed Woodpecker obtained by me in the Hupeh Mts. differs as follows from the north-eastern and south-eastern China birds:—The white on the back is more extensive than in *kaleensis*, resembling in this respect *scintilliceps* from northern Chihli. The axillaries are unmarked

white as in *scintilliceps*, but the underparts are of a richer ochreish brown than even *kaleensis*, while the streaks on the underparts resemble those of the latter form, but are perhaps rather less heavy. A cursory examination of the magnificent series collected by Zappey showed me, however, that great variation occurs among Hupeh and Szechuen birds. But, again, no examples from other parts of China were available for comparison.

94. *Picumnus innominatus chinensis* Hargitt.

T. & B. p. 161.

Chang-yang Hsien. One example 17 September, 1918.

95. **Iynx torquilla* L.

Chang-yang Hsien. Two examples taken at the end of the summer.

Shasi. One seen on 4 September.

96. *Alcedo atthis bengalensis* Gm.

T. & B. p. 157.

Common resident.

97. **Ceryle rudis* L.

Common resident.

98. *Caprimulgus indicus jotaka* T. & S.

T. & B. p. 158.

Shasi. One seen on 16 May.

99. *Acanthyllis caudacuta* (Lath.).

T. & B. p. 159.

One seen flying about the "Bungalow," in the mountains, 5 miles north of Ichang Gorge, about 3000 ft., on 21 May, 1919.

100. *Cuculus canorus telephonus* Heine.

T. & B. p. 159.

Shasi. Heard calling on 24 May, 9 June: a female seen on 1 and 2 May.

Mountains north of Ichang Gorge. Heard on 21 May.

101. **Cuculus micropterus** Gould.

T. & B. p. 159.

Shasi. Heard and seen on 23 May.

Ichang (low hills). Heard on 18 May, and heard and seen on 27 May.

102. ***Clamator coromandus** (L.).

Chang-yang Hsien. A young bird in nestling plumage shot at the end of the summer.

103. **Eudynamis honorata** (L.).

T. & B. p. 159.

Chang-yang Hsien. ♂ imm. 13 September.

104. **Asio otus vel accipitrinus**.

One or two Owls, either Long-eared or Short-eared, seen during winter at Shasi.

105. ***Syrnium aluco harterti**.*Syrnium aluco harterti* La Touche, Bull. B. O. C. xl. 1919, p. 50.

A single example of a Wood-Owl, sexed a male by the collector, obtained on 16 October, 1918, in a forest on the border of Hupeh and Hunan, alt. 4500 ft. (Changlo Hsien) resembles the Himalayan Wood-Owl *S. nivicola*, but differs from it in being throughout much darker, and in having the barring of the underparts very dark, sharply defined, and narrow. Wing 289 mm.

There are in the British Museum two Wood-Owls which are not unlike the Hupeh bird: one from Formosa, collected by Dr. Moltrecht in March 1908, and another from Yunnan (Styan collection). An example of a Wood-Owl, shot by Swinhoe near Peking, is also in the Museum, but this is a very grey bird belonging to another form.

106. **Glaucidium whitelyi** (Blyth).

T. & B. p. 156.

Itu. Two examples, 10 February, 1919.

107. **Aquila chrysaetos* L.

An immature female sent to me alive from Ichang by Mr. P. B. de Rautenfeld, Commissioner of Customs, lived for a few weeks in our garden at Shasi, but succumbed to the summer heat. Wing $25\frac{1}{2}$ in. : total length $35\frac{1}{2}$ in. Iris rich brown; gape, cere, and feet bright yellow. Base of bill bluish, rest of bill dark brown or blackish.

108. **Hieraetus fasciatus* (Vieillot).

A leg of a Bonelli's Eagle, shot in the Hupeh Mts., was sent to me by the late Father Anselme de Hemptinne.

109. *Milvus lineatus* Gray.

Milvus melanotis T. & B. p. 155.

Common resident.

110. *Circus* sp.

Harriers occur commonly on the plain. Some seen on 29 September, 1918, appeared to be *C. spilonotus*.

111. *Buteo buteo japonicus* T. & S.

Buteo buteo plumipes T. & B. p. 155.

Shasi. Seen in November.

112. ?*Accipiter nisus melanoschistus* Hume.

?*Accipiter nisus lodygini* T. & B. p. 154.

Sparrow-hawks were seen on several occasions at Shasi.

113. *Accipiter gularis* (T. & S.).

T. & B. p. 155.

This small Sparrow-hawk appears to be a favourite with hawk-fanciers. I saw, on 9 June, 1918, at Kingchow (near Shasi), in the collection of a Manchu lady, a tame male of this species. The iris was burnt-sienna. I saw other captive birds the same day, and on 24 June following another tame bird, this one an adult female.

114. *Falco subbuteo* L.

Shasi. 20 June, 31 July, 12 September (3). A Hobby flew by our house regularly every evening towards 6 P.M. during September 1918, catching Sparrows as he flew by.

The Hobby does not occur in China except on migration or during summer, and I doubt very much the possibility of there being a resident Chinese race ranging between the Tsing Ling Mts. and Swatow (see *Falco streichi* Hart. & Neum. Vög. pal. Fauna, p. 1074).

115. **Cerchneis tinnunculus** subsp. ?

Cerchneis saturata T. & B. p. 155?

Kestrels are of common occurrence at Shasi.

116. **Turtur chinensis** Scop.

T. & B. p. 144.

A common resident.

117. **Turtur orientalis** Latham.

T. & B. p. 144.

Chang-yang Hsien. Immature bird shot in autumn.

118. **Turtur humilis** Temm.

T. & B. p. 144.

Shasi; 3 May.

Ichang. Seen in gardens at the end of May.

119. **Bambusicola** sp.

Ichang Gorge. Heard on 21 May, 1919.

120. **Phasianus colchicus hemptinnii**.

Phasianus holdereri T. & B. p. 140 (part).

Phasianus colchicus hemptinnii La Touche, Bull. B. O. C. xl. 1919, p. 51.

In their paper, Messrs. Thayer and Bangs describe a Pheasant which they call *Phasianus holdereri* (a synonym of *Ph. c. strauhi* Przw.), and they mention that this Pheasant was taken at altitudes ranging from 2500 to 6000 ft. I was unable to procure a series of the common Ichang Pheasant from the highlands of Hupeh, but a few specimens from the low hills on the south bank of the Yangtze between Ichang and Shasi and from a place 30 miles north of Shasi (undulating country connecting the northern hills with the plain) were sent to me by Fathers A. de Hemptinne and C. Clément of the Belgian Franciscan Mission. These Pheasants proved

to be of great interest, forming evidently a link between the Pheasant of the mountains and that of the plain. The examples obtained from Mopanchow, in the Sungtze district between Ichang and Shasi, came from low hills covered with woods of small pines, and are very closely related to *P. decollatus*. The birds from Shihlipu, about 20 to 30 miles north of Shasi, were shot in low, undulating country and show affinity with the Pheasant from the plains, having greyer backs, a more pronounced white collar, and some of the specimens having the sides of the neck more purple. I compared this series of Pheasants with the fine series of *P. trauchi* in the Tring Museum, and Dr. Hartert agreed with me that the bird from the lower hills of Hupeh is a distinct form*. I subsequently saw the series collected by Zappey, but I had not my specimens to compare with them. It appeared evident, however, that the birds obtained and described by me form a link (as mentioned above) between the Pheasant of the hills and that of the plain. The following are the characteristics of this race:—Crown deep oily-green, concolorous with hind neck, eyebrow absent or very slightly developed, sides of neck more green than purple, white collar slight, always broken in front, flanks and lower hind neck dark, back bright glossy green, wing-coverts sandy grey. It will be noticed that these are practically the same characteristics as those given by Thayer and Bangs for their *P. holdereri*. Probably the Ichang Pheasant, procured by Zappey, is a race of Swinhoe's *decollatus*.

121. *Phasianus colchicus* subsp.?

Phasianus torquatus kiangsuensis T. & B. p. 140.

Pheasants shot on the plain near Shasi appeared to me to be much darker than Lower Yangtze birds. I was,

* Since the above was written I have seen that Dr. Hartert has now united *P. hemptimii* with *P. torquatus* of the Lower Yangtze, and he tells me that he cannot separate the two forms! I must differ from him and would point out that these dark-headed, eyebrow-less, green-backed Hupeh Pheasants are closely related to *P. decollatus* Swinhoe, and only distantly so to the pale-headed, eyebrowed, and blue-backed *torquatus*, which latter form ranges from Shanghai to Kiangsi, and possibly Hankow.

however, able to preserve but one example in faded spring dress, which cannot be distinguished from *Phasianus c. torquatus*.

As is now usual in the vicinity of the China ports open to foreign trade, Pheasants at Shasi are scarce, and good shooting is only possible at some distance from the port. The Pheasants have been destroyed by being shot out of season, and by wholesale massacre for the benefit of canning and cold storage factories, the treaty-port markets, and mail-boats. Protests and petitions from foreign residents in central and north China have so far been unsuccessful to obtain adequate protection for the fast disappearing game of the Yangtze valley, which in a very few years will be as extinct as the "Dodo."

122. *Syrnaticus reevesii* (Gray).

T. & B. p. 143.

Apparently very common in Chang-yang Hsien, whence I received several examples.

123. *Chrysolophus pictus* (L.).

T. & B. p. 143.

Abundant in Chang-yang Hsien and other mountain districts of Hupeh. The Golden Pheasant is, it is said, very hard to shoot, as it keeps to the thick woods and coverts.

124. *Tragopan temminckii* (J. E. Gray).

T. & B. p. 140.

Occurs on the higher mountains of Chang-yang Hsien, but is collected with difficulty.

125. *Coturnix coturnix* L.

Quail are abundant on the plain, but I have only indefinite records of this species. Thayer and Bangs record a large series of the Japanese Quail from Ichang and Chang-yang Hsien.

126. *Turnix blanfordi* Blyth.

T. & B. p. 143.

Common on the plain near Shasi.

127. *Gallinula chloropus parvifrons* Blyth.*Gallinula chloropus orientalis* T. & B. p. 145.128. *Gallicrex cinereus* Gm.

T. & B. p. 145.

Shasi, 29 September. Apparently very common as elsewhere on the Yangtze.

129. *Grus* sp. ?

I have no written record of Cranes from Shasi, but one evening during winter, while waiting for duck, I heard a party passing over.

130. **Hydrophasianus chirurgus* (Scop.).

Summer, near Shasi.

131. *Microsarcops cinereus* Blyth.

T. & B. p. 146.

132. *Charadrius dominicus fulvus* Gm.

T. & B. p. 147.

Shasi, 29 September. Probably common in winter.

133. *Tringa ochropus* (L.).

T. & B. p. 147.

A common winter bird on the plain.

134. **Tringa fusca* (L.).

Shasi market.

135. *Tringa hypoleuca* (L.).

T. & B. p. 147.

Shasi. Common in winter.

136. *Gallinago gallinago* (L.).

T. & B. p. 148.

Shasi. Common from September to the spring.

137. *Gallinago stenura* Horsf.

T. & B. p. 148.

138. *Gallinago megala* Swinhoe.

T. & B. p. 148.

This and the preceding species are common on passage in April, May, August, and September.

139. *Scolopax rusticola* L.

T. & B. p. 148.

Shasi. Common in winter.

140. *Rostratula capensis* (L.).

T. & B. p. 148.

Shasi, 29 September. Doubtless common.

141. **Larus argentatus vegæ* Stejn.

Shasi. Common on the river in winter.

142. *Larus ridibundus* L.

T. & B. p. 146.

Shasi. Common inland on creeks, occasionally seen on the river.

143. **Sterna tibetana* ?

A party of medium-sized Tern seen flying down river on 20 June.

144. *Phalacrocorax carbo* (L.).

T. & B. p. 153.

Shasi. Seen.

145. *Ardea cinerea jouyi* (Clark).*Ardea cinerea jouyi* T. & B. p. 149.

Shasi. Common and probably resident.

146. **Ardea manillensis* Mey.

Plains near Shasi.

147. *Herodias alba* (L.).

T. & B. p. 149.

I was glad to see on 29 September, 1918, several Great Egrets on the plain near Shasi.

148. *Ardeola bacchus* Bp.

T. & B. p. 150.

Shasi Plain. Seen on 29 September.

149. *Nycticorax nycticorax* (L.).

T. & B. p. 150.

Shasi. Seen in summer.

150. *Botaurus stellaris* (L.).

T. & B. p. 150.

Shasi. Common in winter.

151. *Dupetor flavicollis* (Lath.).

T. & B. p. 150.

Shasi, 29 September.

152. **Cygnus* sp.

Shasi. A flock of eleven birds seen flying down the river on 10 February, 1918.

153. **Anser anser rubrirostris* Hodgs.

Shasi market, winter 1917-1918, and in February, 1919.

154. *Anser segetum vel segetum serrirostris*.

T. & B. p. 151.

Shasi market. Common in winter.

155. **Anser middendorffi* Severtzoff.

Shasi market, one specimen.

156. **Casarca rutila* (L.).

Shasi. Common in winter, seen in market.

157. **Nettopus coromandelianus* (Gm.).

Shasi. One seen on 24 June, 1918. It perched on the Meteorological Observatory and remained there some time, preening its feathers, without apparent fear of the wind gauges.

158. *Anas platyrhyncha* L.

Anas platyrhynchos T. & B. p. 151.

Shasi. Common in winter.

159. * *Anas zonorhyncha* Swinh.

T. & B. p. 151.

Shasi. Common in winter.

160. * *Eunetta falcata* (Pall.).

Shasi market, 30 January and 25 February, 1918.

Common in winter.

161. * *Chaulelasmus streperus* (L.).

Shasi market, 25 February, 1918 (one).

162. *Nettium formosum* (Georgi).

T. & B. p. 151.

Shasi market, 30 January and 25 February, 1918

(common).

163. *Nettium crecca* (L.).

T. & B. p. 151.

Shasi. Abundant in winter.

A huge flight of Duck, probably composed of this species went over Shasi at dusk on 31 December, 1917. The flock must have comprised tens of thousands of birds; the noise of their wings was like that of an approaching earthquake, and the walls of the house I was in shook as they went over.

164. * *Mareca penelope* (L.).

T. & B. p. 151.

Shasi market, 30 January, 1918 (one or two).

165. * *Dafila acuta* (L.).

T. & B. p. 151.

Shasi market, 30 January and 25 February, 1918.

Common in winter.

166. * *Spatula clypeata* (L.).

Shasi market, 30 January and 25 February, 1918 (several).

167. * *Fuligula ferina* (L.).

T. & B. p. 152.

Shasi market, 25 February, 1918 (two).

168. * *Fuligula rufina* (Pall.).

T. & B. p. 152.

Shasi market, 30 January, 1918 (two).

169. * *Fuligula baeri* Radde.

Shasi market, 25 February, 1918 (one).

170. * *Fuligula ferruginea* Gm.

Shasi market, 25 February, 1918 (two or three).

171. *Fuligula cristata* (L.).

T. & B. p. 152.

Shasi market, 25 February, 1918 (three).

172. *Mergus merganser* L.

T. & B. p. 152.

Shasi. Abundant in winter.

173. *Podiceps minor philippensis* (Bonnat.).

Tachybaptus ruficollis poggei T. & B. p. 146.

Shasi. Common on ponds and on river in winter.

XXVII.—*The Arabian Ostrich.*

By DOUGLAS CARRUTHERS, M.B.O.U.

THE interesting note in the 'Field' of 22 April last to the effect that eggs of the Arabian Ostrich had been recently safely brought, by air and sea, in 30 days from the nest in northern Arabia to London, and had been placed in an incubator in the Zoological Gardens, tempts me to send you some notes of my own, collected over many years, on this interesting and little-known species.

First of all as to the actual locality whence these eggs were obtained by the Sulubbi hunter and brought in to Ramadi. "Three hundred miles from Baghdad, roughly half-way between Baghdad and Jerusalem," brings one to the very centre of the southern Syrian Desert, in the neighbourhood of Jebel Anaza. This is a region we know little or nothing about. Musil, the Austrian explorer, is the only European who has been across it (in 1909), although Leachman in 1912 skirted its eastern flank. It is therefore